Methods: One hundred forty (140) patients who were admitted to the Jeongeup City Geriatric Hospital were examined for the presence or absence of ELC and HTN. The one examined the ELC of patients and the other examined the presence of hypertension. The presence of right ELC, left ELC, right or left ELC, and right and left ELC were, respectively, compared with the presence of HTN. The chi-square test was used to analyze the correlation between ELC and HTN.
Results: The presence of right ELC was significantly related to the presence of HTN ($p = 0.001$). The sensitivity, specificity, and positive and negative predictability of ELC for diagnosis of HTN were 0.755, 0.524, 0.787, and 0.478, respectively. The presence of left ELC was significantly related to the presence of HTN ($p = 0.002$). The sensitivity, specificity, and positive and negative predictability of ELC for diagnosis of HTN were 0.745, 0.524, 0.785, and 0.468, respectively. The presence of right or left ELC was significantly related to the presence of HTN ($p < 0.001$). The sensitivity, specificity, and positive and negative predictability of ELC for diagnosis of HTN were 0.806, 0.500, 0.790, and 0.525, respectively. The presence of right and left ELCs was significantly related to the presence of HTN ($p = 0.007$). The sensitivity, specificity, and positive and negative predictability of ELC for diagnosis of HTN were 0.694, 0.548, 0.782, and 0.434, respectively.
Conclusions: These results show that the presence of ELC is significantly associated with hypertension.
Keywords: earlobe crease; hypertension; auricular point diagnosis; auriculotherapy

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Effectiveness of Acupuncture in Reducing the Severity of Fatigue in Lung Cancer Patients: A Pilot Study

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Abstract

Objectives: Fatigue is a common and distressing symptom that is a concern for cancer patients and that has a decisive effect on the quality of life. The purpose of this study was to examine the feasibility of a clinical trial to evaluate the efficacy and the safety of using acupuncture to reduce the level of fatigue in lung cancer patients.
Methods: A total of nine lung cancer patients who complained of fatigue were treated by acupuncture twice a week for four weeks (eight times in total). The severity of fatigue was measured by using the FSS (Fatigue Severity Score). On visits 1 and 10, we checked the FSS. To check the safety of the acupuncture treatment, we did blood tests.
Results: After 4 weeks of acupuncture treatment, the FSS was significantly decreased from 4.92 ± 1.06 to 3.74 ± 1.37 ($p = 0.008$), and the level of hemoglobin was significantly increased from 10.87 g/dl to 12.01 g/dl ($p = 0.014$). No other lab measures indicated any significant differences between before and after acupuncture treatment.
Conclusions: This study suggests that acupuncture treatment will be beneficial for lung cancer patients to reduce the severity of fatigue and that acupuncture treatment is safe for lung cancer patients. A large-scale study to confirm the efficacy and the safety of acupuncture treatment for cancer patients is needed.
Keywords: cancer-related fatigue; fatigue severity score; lung cancer; acupuncture

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Review of Tumor Dormancy Therapy Using Traditional Oriental Herbal Medicine

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Abstract

Objective: Standard cancer therapy prolongs survival, but can be detrimental to the quality of life, compromise the immune system, and leave residual disease that can cause recurrence years or decades in the future. Tumor dormancy therapy is a novel therapeutic approach that may improve these shortcomings, promote quality of life, and prolong survival. The aim of this study was to analyze studies on dormancy therapy, especially studies using traditional Oriental herbal medicine, so as to evaluate the efficacy of dormancy therapy with traditional oriental herbal medicine.

Methods: We conducted a systematic literature review using Scientific and Technical Information Integration Services (NDSL), PubMed, and RISS. We searched for clinical reports, papers, and books related to tumor metastasis, recurrence, immunotherapy, tumor dormancy, and traditional oriental herbal medicine with anticancer effects. Seventy-nine (79) experimental and clinical articles in both Korean and English were reviewed. This study was conducted from March 1, 2012 to May 31, 2012.
Results: This approach, Tumor dormancy therapy, rather than seeking to remove the tumor, includes combination of low-dose chemotherapy, immunotherapy, immunosurveillance, and other methods to stabilize tumor growth and to enhance the host is immunity against disseminated tumor cells and thus to manage cancer as a chronic disease while maintaining quality of life. In particular, integrative use of Oriental herbal medicine has been shown to induce or maintain tumor dormancy, increase the effectiveness of conventional chemotherapy, improve quality of life, and prolong survival.
Conclusion: Tumor dormancy therapy is a promising novel therapeutic approach that may be especially effective with Oriental herbal medicine. Further research is needed to determine its potential mechanisms and therapeutic applications.
Keywords: cancer dormancy; dormancy therapy; traditional Oriental herbal medicine

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Anti-Oxidant and Hepatoprotective Activities of *Ziziphus mucronata* Fruit Extract Against Dimethoate-Induced Toxicity

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Abstract

Objective: The study was carried out to evaluate the hepatoprotective and antioxidant potential of *Ziziphus mucronata* (ZM) fruit extract.
Methods: The different types of fruit extract were prepared by soaking the dry powdered fruit in different solvents followed by rotary evaporation. Each extract was tested for its phenol content and antioxidant activities. An in vivo study was performed in Sprague-Dawley (SD) rats. Thirty adult male SD rats (aged 21 weeks) were divided into six groups of five rats each and treated as follows: The normal control (NC) received distilled water while the dimethoate control (DC) received 6 mg/kg.bw.day-1 dimethoate dissolved in distilled water. The experimental groups E1, E2, E3, and E0 received dimethoate (6 mg/kg.bw) + ZMFM (100 mg/kg.bw-1), dimethoate (6 mg/kg.bw) + ZMFM (200 mg/kg.bw-1), dimethoate (6 mg/kg.bw) + ZMFM (300 mg/kg.bw-1), and ZMFM (300 mg/kg.bw-1) only. Both the normal control and the dimethoate control groups were used to compare the results. After 90 days, rats were sacrificed, blood was collected for biochemical assays, and livers were harvested for histological study.
Results: High phenol content was estimated, and 2, 2-diphenyl-1-picryl hydrazyl radical (DPPH) spectrophotometric, thin layer chromatography (TLC) and 2, 2-Azobis-3-ethyl benzothiazoline-6-sulphonic acid (ABTS) assays showed a high anti-oxidant activity among the extracts. The preventive effects observed in the E1, E2 and E3 groups proved that the extract could prevent dimethoate toxicity by maintaining normal reduced glutathione (GSH), vitamin C and E, superoxide dismutase, catalase, cholineasterase and lipid profiles. The preventive effect was observed to be dose dependent. The EO group showed no extractinduced toxicity. Histological observations agreed with the results obtained in the biochemical studies.
Conclusion: The study demonstrated that ZM methanol fruit extract is capable of attenuating dimethoate-induced toxicity because of its high antioxidant activity.
Keywords: antioxidants; dimethoate; oxidative stress; phenol content; toxicity; *Ziziphus mucronata*

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Identification and Analysis of the Novel *pGAPDH-w* Gene Differentially Expressed in Wild Ginseng

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Abstract

Objective: Panax ginseng is one of the most medicinally used herbal medicines in the world. Wild ginseng is widely accepted to be more active than cultivated ginseng in chemoprevention. However, little has actually been reported on the differences between wild ginseng and cultivated ginseng.
Method: To identify wild ginseng-specific genes, we used suppressive subtraction hybridization.
Results: We report that one of the clones isolated in this screen was the *GAPDH* (glyceraldehyde 3-phosphate dehydrogenase) gene (designated *pGAPDH-w*). DNA BLAST sequence analysis revealed that this *pGAPDH-w* gene contained novel sequences of 94 bp. RT-PCR results showed that the expression of the *pGAPDH-w* gene was significantly up-regulated in the wild ginseng as compared with the cultivated ginseng.
Conclusion: The *pGAPDH-w* gene may be one of the important markers of wild ginseng.

Keywords: hybridization (SSH); cultivated ginseng; PCR; pGAPDHw gene; suppressive subtraction; wild ginseng

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